



SAFETY ALERT

**17th Coast Guard District
United States Coast Guard
P. O. Box 25517
Juneau, Alaska 99802**

CALL FOR A FREE DOCKSIDE EXAM

MSO Anchorage	271-6725	MSD Sitka	966-5454
MSO Valdez	835-7223	MSD Ketchikan	225-4496
MSO Juneau	463-2448	MSD Kodiak	486-5918
MSD Dutch Harbor	581-3466	MSD Kenai	283-3292

The seiner EVANICK was lost on a trip from Kodiak to Togiak. Three crewmen and the captain of the vessel are all presumed drowned. No mayday was received from EVANICK, and no one witnessed the accident. The Coast Guard was initially alerted to the distressed vessel from a 406 EPIRB hit. Once on scene responders found an overturned vessel with no sign of survivors. Divers were brought to the scene and the inside of the vessel was searched. The raft was in its bracket and the survival suits were on board. Whatever happened, happened suddenly.

The EVANICK was a 48 foot Seiner. She had hard sharp chine, a square stern, shallow draft, and a small rudder in a tunnel. She was a vessel designed for near shore protected water operations. She was rigged at the time of the accident to fish with seine for herring in Bristol Bay. EVANICK had a current US Coast Guard "Dockside Decal" and was a well equipped and well found vessel. EVANICK was crewed by competent experienced fishermen.....So what happened?

It seems the EVANICK exceeded her design capabilities due to several factors. Weather conditions at the time of the accident were severe with seas reported to be as high as 18 ft and winds at 35+ knots. EVANICK was a shallow draft vessel with a modified displacement hull. With her square stern and small rudder, she would undoubtedly not have performed well in following seas of the size encountered. Operating a vessel like the EVANICK in large following seas would possibly lead to a broaching situation. Broaching occurs when the stern of a vessel is lifted too high by following seas, causing the bow to bury itself in the sea. Such a position permits the stern to pivot towards the bow. If this is not controlled it will lead to broaching and capsize. Given EVANICK's small rudder and square stern it is doubtful she could have recovered.

Interviews conducted by the Coast Guard after the accident indicate the EVANICK loaded a 17 foot jet skiff on deck prior to departure. The approximate weight of this skiff was 4500 lbs. Adding this much weight high on deck of the EVANICK would have two results. First, freeboard would have been reduced. Any reduction in freeboard reduces the amount of energy left to recover from heeling forces. For example, prior to loading a skiff, a vessel could potentially recover from a 30 degree roll, with a skiff on deck she could only recover from 20 degrees of roll. This of course becomes critical when the vessel is exposed to excessive heeling forces created by wind and waves. Second, putting weight high on deck reduces the distance between the center of gravity and the meta center of the vessel. This decreases what's called the metacentric height of a vessel and is what naval architects and vessel designers use to measure a vessel's intact stability. If water from a following sea was able to board the skiff, EVANICK's problems would have been compounded.

It is important for fishermen to understand the limitations of their vessels. Many hull types are used in the Alaskan seine fleet, hull forms like EVANICK, as well as deep full keeled displacement hulls designed for deep water and heavy weather use. More and more seiners are being used to pursue multiple fisheries year round in Alaskan waters. Many seiners have been modified and altered in ways that can have detrimental effects on stability. Vessels like EVANICK are being used far from shore and often make long transits across open sea to reach fishing grounds. When operating small boats it's important to plan trips based on weather information and to plan for extra time and routes that allow for safe harbor. And of course Fishermen should be thoroughly familiar with their vessels performance limitations and handling characteristics.



Large seine skiff stored on deck.

The loss of life at sea is always devastating. Accidents like the EVANICK are especially tragic and remind us all that even well equipped and well trained crews can be overwhelmed by the elements.